

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

ENTRY LEVEL

CODE	SKILL BLOCK	REQUIREMENTS	COMPLEMENT	VALUE
1M1 * Complete 3 of 5	A. Small Hand & Power Tools B. Introduction to Work Zone Traffic Control Devices C. Introduction to Erosion Control Devices D. Basic Two-Way Radio Communication E. Operation of Chain Saw, or Operation of Hand Power Compactors, or Operation of Hand Power Auger	*A. View “Hand & Power Tool Safety” Video #226 *B. View “Basic Traffic Control” Video #301 *C. View Erosion Control Video ( Complete self-study manual ( 1M1 )( MNT 497) *D. Complete Basic Two-Way Radio Communications Guide EQP-529 (161080046) *E. Complete Chain Saw Guide EQP-507 (161080020), or Complete Compactor Guide EQP-410 (161080002), or Complete Hand Power Auger Guide EQP-525 (161080042) <b>NOTE:</b> A, B, C, & D Perform work to instructor’s satisfaction.	No Limit	\$312
1M2 *	Operate Second Piece of Category A Equipment	*Complete one (1) category A equipment guide	No Limit	\$312
1M3 *	Operate Third Piece of Category A Equipment	*Complete one (1) category A equipment guide	No Limit	\$312
1M4	Commercial Drivers License	Obtain a Commercial Drivers License with required endorsements from the Division of Motor Vehicles	No Limit	\$0
1M5 *	Operate Medium Dump Truck	A. Prerequisite 1M4 *B. Complete Dump Truck Guide EQP-415 (161080003)	No Limit	\$416

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

1M6 *	Operate Fourth Piece of Category A Equipment	Complete one (1) category A equipment guide	No Limit	\$312
1M7 *	Conduct Flagging Operations	A. Complete Flagging School SAF 238 *B. Perform flagging operation for 40 hours to the instructor's satisfaction	No Limit	\$208

Requirements to advance to Intermediate Level:

- Minimum time requirement at Entry Level: 2 years
- Recommend completion of Skill Blocks:  
1M1, 1M2, 1M3, 1M4, 1M5, 1M6, & 1M7
- Quick reference for denoting Skill Blocks requiring an OJT instructor. The “\*” in the “Requirements” column indicates the specific portion of training that requires assignment of an OJT instructor. The OJT can be an engineer, supervisor, or transportation worker. The transportation worker OJT's must attend the SBP-400 instructor training course. SBP-400 is recommended for transportation supervisor level OJT's.

CATEGORY “A” EQUIPMENT			
Air Compressor	EQP-400 (161080000)	Pulverizer Mixer	EQP-511 (161080024)
Asphalt Kettle	EQP-542 (161080059)	Sheep Foot Roller	EQP-425 (161080005)
Brush Chipper	EQP-509 (161080022)	Specialized Mower	EQP-548 (161080070)
Curb Machine	EQP-517 (161080033)	Steel Wheel Roller	EQP-513 (161080026)
Cutoff Saw	EQP-519 (161080035)	Tractor Auger/Post Driver	EQP-440 (161080008) EQP-405 (161080001)
Forklift	SAF-240	Tractor Mower	EQP-440 (161080008) EQP-420 (161080006)
Medium Dump Truck	EQP-415 (161080003)	Tractor Sweeper	EQP-440 (161080008) EQP-435 (161080007)
Pipe Cleaner	EQP-550 (161080077)	Vibrator Roller Compactor	EQP-556 (161080088)
Pneumatic Tire Roller	EQP-506 (161080019)		

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

INTERMEDIATE LEVEL

CODE	SKILL BLOCK	REQUIREMENTS	COMPLEMENT	VALUE
2M1 *	Supervision of Inmates	A. Complete Inmate Labor Seminar (SEM-130) *B. Supervise inmates for 40 hours to instructor's satisfaction	No Limit	\$312
2M2 *	Maintenance of Asphalt Storage Tank	Complete Asphalt Emulsion Storage & Handling MNT-350 (161080086)	1 – 2 per Patch Crew & 1 - 2 per Yard	\$312
2M3 *	Operate 1 Piece of Category B Equipment	*Complete one (1) category B equipment guide	No Limit	\$624
2M4 *	Snow and Ice Control	A. Prerequisite 1M5 *B. Complete Snow and Ice Control chapter EQP-415 (161080003) *C. Operate snow and ice control equipment for 16 hours during storm conditions to instructor's satisfaction	No Limit	\$312
2M5 *	Operate Second Piece of Category B Equipment	*Complete second category B equipment guide	No Limit	\$624
2M6	Deleted			
2M7 *	Operate Third Piece of Category B Equipment	*Complete third category B equipment guide	No Limit	\$624
2M8	Asphalt Pavement Patching	A. Prerequisite: Operate Asphalt Equipment *B. Complete Asphalt Pavement Patching Manual MNT-494 (161080073)	No Limit	\$624
2M9 *	Facility Maintenance	A. Have skills in small engine repair, carpentry, electrical, and plumbing. *B. Perform duties for six months to instructor's satisfaction	1 – 2 per Maintenance Facility	\$312

**SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE**

2M10 *	HazMat Spill Response	* A. Completion of HazMat Spill Response Course First Responders – Operational Level” SAF-318 * B. Perform emergency response activities for six hours to instructor’s satisfaction	CME sets Limit	\$416
2M11 *	Incidental Concrete Construction	*Complete Incidental Concrete Construction Manual MNT-483 (161080036)	1 – 3 per Maintenance Facility	\$312
2M12 *	Concrete Pavement Patching	*Complete Concrete Pavement Patching Manual MNT-493 (161080072)	1 – 2 per Maint Facility	\$624

Requirements to advance to Journey Level:

- Minimum time requirement at Intermediate Level: 2 years
- Recommend completion of Skill Blocks:  
2M3, 2M4, & 2M5

\* Quick reference for denoting Skill Blocks requiring an OJT instructor. The “\*” in the “Requirements” column indicates the specific portion of training that requires assignment of an OJT instructor. The OJT can be an engineer, supervisor, or transportation worker. The transportation worker OJT’s must attend the SBP-400 instructor training course. SBP-400 is recommended for transportation supervisor level OJT’s.

CATEGORY “B” EQUIPMENT			
Asphalt Distributor Truck Mounted	EQP-460 (161080012)	Lube Truck	EQP-522 (161080039)
Asphalt Mixer (McConn)	EQP-553 (161080084)	Asphalt Maintainer - (Lee Boy)	EQP-549 (161080071)
Asphalt Patcher/Trk Mtd	EQP-526 (161080043)	Post Driver Trk Mtd	EQP-555 (161080087)
Asphalt Patch Mach AMZ	EQP-544 (161080061)	Skid Steer	EQP-554 (161080085)
Crack Sealing Machine	EQP-527 (161080044)	Street Sweeper	EQP-561 (161080095)
Ditching Machine	EQP-541 (161080058)	Tandem Dump Truck	EQP-415 (161080003)
Force Feed Loader	EQP-450 (161080009)	Tractor “A” Boom Mower	EQP-440 (161080008) EQP-420 (161080006)
Front End Loader	EQP-445 (161080011)	Truck w/Aerial Device	EQP-534 ( 161080051)

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

JOURNEY LEVEL

CODE	SKILL BLOCK	REQUIREMENTS	COMPLEMEN T	VALUE
3M1 *	Shoulder and Ditch Maintenance	*A. Complete Shoulder and Ditch Maintenance MNT-495 (161080074) *B. Complete Elevation and Grade Manual MNT-489 (161080063)	No Limit	\$520
3M2 *	Pipe Installation and Drainage Maintenance	*A. Complete Drainage Excerpts & Pipe Installation Manual MNT-481 (161080027) *B. Complete Elevation and Grade Manual MNT-489 (161080063)	No Limit	\$520
3M3 *	Inspection of Contract Mowing and other similar Maintenance Functions	A. Complete Basic Work Zone Safety Course SAF-500 *B. Complete Purchase Order Contract Course SSC-120 *C. Perform inspection for six months to instructor's satisfaction	1 – 2 per Maintenance Facility	\$520
3M4 *	Lead Worker, one who supervises 2 or more employees daily	*A. Complete Field Maintenance Manual MNT-482 (161080028) B. Complete TW's Transition To Leadership Course SBP-300 *C. Perform Lead Worker activities for six months to instructor's satisfaction D. Complete Basic Work Zone Safety Course SAF-500	1 per crew	\$1,040
3M5 *	Plan Development and Layout of Traffic Control in a Work Zone for 2-Lane Roads	A. Complete Basic Work Zone Safety Course SAF-500 *B. Implement traffic control in work zones for six months to instructor's satisfaction	No Limit	\$728
3M6 *	Guardrail Installation and/or Repair	*Complete Guardrail Installation & Repair MNT-496 (161080075)	1 per crew	\$416

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

3M7 *	Operate 1 Piece of Category C Equipment	*Complete one (1) category C equipment guide	1 – 2 per C Equipment	\$1,040
3M8	Fence Installation and/or Repair	*Complete Fence Installation Manual MNT-492 (161080068)	1 – 2 per crew	\$416
3M9	Deleted			
3M10 *	Transport by Truck and Trailer with gross haul weight rated 10,000 lb. and above.	A. Prerequisite: Class A CDL *B. Complete Trailer (Tow Type) Guide EQP-516 (161080032)	No Limit	\$416
3M11 *	Brick and Block Masonry	*Complete Brick and Block Wall Construction Manual MNT-480 (161080013)	1 – 2 per Maintenance Facility	\$416
3M12 *	Installation & Maintenance of Erosion Control Devices	A. * Complete Installation & Maintenance of Erosion Control Devices MNT-564 (161080099) B. Review video, Installation & Maintenance of Erosion Control Devices C. Perform operation for six months to instructor's satisfaction	No Limit	\$416

Requirements to advance to Advanced Level:

- Minimum time requirement at Journey Level: 3 years
- Recommend completion Skill Blocks: 3M5, 3M7, & 3M10

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

\* Quick reference for denoting Skill Blocks requiring an OJT instructor. The “\*” in the “Requirements” column indicates the specific portion of training that requires assignment of an OJT instructor. The OJT can be an engineer, supervisor, or transportation worker. The transportation worker OJT’s must attend the SBP-400 instructor training course. SBP-400 is recommended for transportation supervisor level OJT’s.

CATEGORY “C” EQUIPMENT			
Asphalt Distributor 800 g	EQP-543 (161080060)	Motor Grader (Rough)	EQP-508 (161080021)
Asphalt Tanker	EQP-521 (161080038)	Scraper	EQP-515 (161080031)
Backhoe	EQP-514 (161080030)	Track Loader	EQP-560 (161080094)
Chip Spreader	EQP-512 (161080025)	Tractor Trailer (Low Boy)	EQP-520 (161080037)
Crawler Tractor	EQP-455 (161080010)	Widening Machine	EQP-540 (161080057)
Motor Grader Mower	EQP-545 (161080062)		

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

ADVANCED LEVEL

CODE	SKILL BLOCK	REQUIREMENTS	COMPLEMENT	VALUE
4M1	Read and Interpret Plans and Specifications	A. Complete Math Review One Course SSC-010 B. Complete Plan Reading Course SSC-030 C. Study portion of “N.C. Standards Specifications for Roads and Structures” for projects being built.	1 – 2 per Maintenance facility	\$624
4M2 *	Inspection of Purchase Order and Contract Operations	A. Prerequisite 3M5 and 4M1 B. Complete Basic Inspection Course SSC-050 C. Complete Purchase Order Contract SSC-120 *D. Perform inspection for three months to instructor’s satisfaction	1 – 2 per Maintenance Facility	\$728
4M3	Serve as Competent Person on Trenching and Shoring Operations	Complete Shoring and Trenching Course SAF-250	1 - 2 per Backhoe or Excavator	\$832
4M4 *	Supervise Fully Operational Rental Equipment Operations	A. Prerequisites: 3M1, 3M2, 3M5, or 3M7 that pertain to operation *B. Complete Rental Equipment Supervisory Manual MNT-490 (161080064) *C. Supervise fully operated rental equipment for six months to instructor’s satisfaction.	1 – 2 per Maintenance Facility	\$936
4M5	Explosives Certification	A. Completion of Explosives Specialist Training SAF-150 B. Maintain certification by taking SAF-151 every three (3) years	1 – 3 per Maintenance Facility	\$832



SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

4M6 *	Operate 1 Piece of Category D Equipment	*A. Complete one (1) category D equipment guide, or *B. Complete Motor Grader Fine Grade duties for six months to instructor's satisfaction.	1 – 2 per D Equipment	\$1,040
4M7 *	Operate Motor Grader with Slope Attachment	A. Prerequisite 3M7 – Operate Motor Grader *B. Completion of Motor Grader Slope Attachment Guide EQP-518 (161080034)	1 – 2 per Slope Blade	\$416
4M8 *	Operate Second Piece of Category C Equipment	*Complete second category C equipment guide	1 – 2 per C Equipment	\$520
4M9 *	Operate Third Piece of Category C Equipment	*Complete third category C equipment guide	1 – 2 per C Equipment	\$520
4M10	Third Party Company Examiner (CDL – Road Test and Certification)	Complete certification by Division of Motor Vehicles and be an active Examiner	1 - 2 per Maintenance Facility	\$520
4M11 *	Instructor: Equipment Training Guides, Procedural Training Manuals, or Other Formal Training Needs	A. Complete On The Job Training SBP-400 B. * Complete training duties for six months to Supervisor's satisfaction	CME sets Limit	\$520
4M12 *	Force Account Construction	A. Prerequisite: 3M5 and 3M7 * B. Complete Force Account Construction Course MNT-491 (161080067)	1 – 2 per Grading Crew	\$1,040
4M13 *	Plan Develop and Layout of Traffic Control in a Work Zone on Multi-Lane Roads	A. Prerequisite: 3M5 B. Complete Intermediate Work Zone Safety Course SAF 505 C. * Implement traffic control in work zones to correct standards for 6 months to instructor's satisfaction.	1 per Crew	\$728

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

Requirements to advance to Specialist: Level

- Minimum time requirement at Advanced Level: 1 year
- Recommend completion Skill Block: 4M6

\* Quick reference for denoting Skill Blocks requiring an OJT instructor. The “\*” in the “Requirements” column indicates the specific portion of training that requires assignment of an OJT instructor. The OJT can be an engineer, supervisor, or transportation worker. The transportation worker OJT’s must attend the SBP-400 instructor training course. SBP-400 is recommended for transportation supervisor level OJT’s.

CATEGORY “D”	
Asphalt Paving Machine	EQP-546 (161080065)
Motor Grader (Fine Grade)	EQP-508 (161080021)
Rubber Tire Excavator	EQP-524 (161080041)
Track Excavator	EQP-523 (161080040)

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

SPECIALIST LEVEL

CODE	SKILL BLOCK	REQUIREMENTS	COMPLEMENT	VALUE
5M2 *	Senior Lead Worker	A. Prerequisite: Complete SBP-300 * B. Complete Field Maintenance Manual MNT-482 (161080028) C. Complete Introduction To Supervision SBP-510 D. Complete Procedure Manual for work executed (See table below) ** E. Perform work for 6 months to instructor's satisfaction (to include issue work assignments, review of work, provide technical assistance, and conduct minor training)	1 per Maintenance  Crew lead by a TSI with 4 or more employees.	\$1,040
5M3 *	Senior Instructor: Equipment Training Guide (including Category D Equipment Guides), Procedural Training Manuals or other formal training needs	A. Prerequisite: On The Job Training SBP-400 B. Prerequisite: Level 5 C. Complete Essential Skills For OJT Trainers SPB-500 ** D. Complete training duties for 6 months to supervisor's satisfaction	CME sets limit – not to exceed number of "D" pieces of equipment	\$832
5M4 *	Operate Snow Blower	Complete Snow Blower guide EQP-547 (161080069)	2 per Piece of Equipment	\$260

- The "\*" in the "Requirements" column indicates the specific portion of training that requires assignment of an OJT instructor. The OJT can be an engineer, supervisor, or instructor (4M11), or a senior instructor (5M2).
- The double "\*\*" indicates the need for an engineer, supervisor, or senior instructor.

SBP – SKILL BLOCK PLAN  
ROADWAY MAINTENANCE

Category “D” Equipment and Procedure Manual tables on next page.

CATEGORY “D”	
Asphalt Paving Machine	EQP-546 (161080065)
Motorgrader (Fine Grade)	EQP-508 (161080021)
Rubber Tire Excavator	EQP-524 (161080041)
Track Excavator	EQP-523 (161080040)

Procedure Manuals for Work Executed	
Incidental Concrete Construction	MNT-483 (161080036)
Concrete Pavement Patching	MNT-493 (161080072)
Shoulder & Ditch Maintenance	MNT-495 (161080074)
Drainage Excerpts & Pipe Installation	MNT-481 (161080027)
Guardrail Installation	MNT-496 (161080075)
Fence Installation & Repair	MNT-492 (161080068)
Force Account Construction	MNT-491 (161080067)
Asphalt Pavement Patching	MNT-494 (161080073)